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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,118	01/18/2002	Tomoyuki Maeda	218347US0SRD	6917

22850 7590 04/09/2003

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ALEXANDRIA, VA 22314

EXAMINER

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/050,118

Applicant(s)

MAEDA ET AL.

Examiner

Kevin M Bernatz

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Coffey et al. (U.S. Patent No. 5,989,728).

Regarding claims 1, 6 and 11, Coffey et al. disclose a magnetic recording medium comprising a substrate (*Figure 4 – element 113*), an underlayer formed on the substrate (*element 114*), and a magnetic layer formed on the underlayer (*element 112*), wherein the magnetic layer comprises (a) crystal grains having an L1<sub>0</sub> structure mainly including Fe and Pt (claim 1), Fe and Pd (claim 6) or Co and Pt (claim 11) (*Coffey et al.: col. 3, lines 42 – 63; col. 4, lines 11 – 12; and col. 7, lines 14 – 20*), and (b) 0.1 to 50 atomic percent of at least one element selected from the group consisting of Cu, Au, Zn Sn, Pd and Mn (*col. 4, lines 13 – 32; col. 7, lines 34 – 55; col. 12, lines 11 – 39; and*

*Figures 9 and 10*); and a protective layer formed on the magnetic layer (*col. 11, lines 6 – 10 and lines 17 – 19*).

Regarding claims 2, 7 and 12, Coffey et al. disclose quartz (i.e. "glass") substrates as being suitable for the disclosed invention (*col. 8, lines 11 - 17*).

Regarding claims 3, 4, 8, 9, 13 and 14, Coffey et al. disclose composition ranges meeting applicants' claimed limitations (*col. 12, lines 11 – 20 and lines 35 – 37 and Figures 9 and 10 – wherein Coffey et al. disclose  $(\text{Co}_{57}\text{Pt}_{43})_{88}\text{Au}_{12}$  and  $(\text{FePt}_{43})_{88}\text{Au}_{12}$  as two specific embodiments wherein FePd, FePt and CoPt are disclosed as equivalent compounds previously by Coffey et al. at col. 7, lines 18 – 20*).

Regarding claims 5, 10 and 15, Coffey et al. disclose thickness values meeting applicants' claimed range (*col. 8, lines 4 – 10 and col. 12, lines 40 - 41*).

### **Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. IDS reference Kitakami et al. (App. Phys. Let., 78(8), 1104, 2001) teach adding elements meeting applicant's claimed limitations in substantially identical composition ranges as applicants (*Abstract and Figures*). The Examiner notes that Kitakami et al. is presently valid prior art since applicants' request for priority has not been perfected.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (703) 308-1737. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

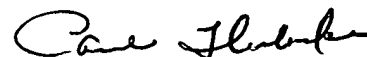
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



KMB  
April 4, 2003



Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700